

# UTILITY PATENT APPLICATION TRANSMITTAL

(Only for new nonprovisional applications under 37 CFR 1.53(b))

|                      |   |
|----------------------|---|
| Attorney Docket No.  | DPL-031   |
| First Named Inventor | Shu   |
| Title                | MANET Routing Based on Best Estimate of Expected Position |

**APPLICATION ELEMENTS**

ADDRESS TO: Mail Stop Patent Application  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

1. ☒ Fee Transmittal Form
2. ☒ Small Entity Status  
☒ Applicant claims small entity status  
☐ Status established in prior application and is still proper and desired
3. ☒ Specification and Drawings [Total Pages: 20]  
 - Written Description - (13 pages)  
 - Claims - (4 pages)  
 - Abstract - (1 page)  
 - Sheets of Drawings - (2 sheets)  
☒ Formal  
☐ Informal
4. ☒ Oath or Declaration [Total Pages: 3]  
 a. ☒ Newly executed (original)  
 b. ☐ Copy from a prior application (37 CFR 1.63(d))  
 (for continuation/divisional with Box 17 completed)  
 [Note Box 5 below]
5. ☐ Incorporation by Reference (usable if Box 4b is checked)  
 The entire Disclosure of the prior application, from which a copy of the oath or declaration is supplied under Box 4b, is considered as being part of the disclosure of the accompanying application and is hereby incorporated by reference therein.
6. ☒ Application Data Sheet
7. ☐ Nucleotide and/or Amino Acid Sequence Submission  
☐ Computer Readable Form (CRF)  
☐ Paper Copy (identical to computer copy)  
☐ CD (2 copies) (identical to computer copy)  
☐ Statement verifying identity of above copies

**ACCOMPANYING APPLICATION PARTS**

8. ☐ 37 CFR 3.73(b) Statement (when there is an assignee)  
☒ Power of Attorney
9. ☐ English Translation Document (if applicable)
10. ☒ Information Disclosure Statement (IDS)/PTO-1449  
☒ Copies of IDS Citations
11. ☐ Preliminary Amendment  
☐ Drawings [Total Sheets ]
12. ☒ Return Receipt Postcard (specifically itemized)
13. ☐ Certified Copy of Priority Document(s) (if foreign priority claimed)
14. ☐ Nonpublication Request Under 35 U.S.C. 122(b)
15. ☐ CD in duplicate for large table or computer program
16. ☐ Other:


17. ☐ If a **CONTINUING APPLICATION**: Amend the specification by inserting on page 1, before the first line, the sentence:  
 --This is a ☐ continuation ☐ divisional ☐ continuation-in-part of prior application Serial No. / , filed on , , the entire disclosure of which is incorporated by reference herein.--  
**Priority to the above application(s) is claimed under 35 U.S.C. 120.**  
 Prior application information: Examiner: . Group/Art Unit: .

18. ☐ **Priority - 35 U.S.C. 119**  
☐ Priority of application Serial No. filed on in is claimed under 35 U.S.C. 119.  
☐ The certified copy has been filed in prior U.S. application Serial No. / on .  
☐ The certified copy will follow.

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**SIGNATURE BLOCK**

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22783 U.S. PTO

Express Mail Mailing Label No. EL988704148US

# **FEE TRANSMITTAL** **FY 2004**

Complete if Known

|                           |                  |
|---------------------------|------------------|
| Application Serial Number | Not yet assigned |
| Filing Date               | Herewith         |
| First Named Inventor      | Shu              |
| Group Art Unit            | Not yet assigned |
| Examiner Name             | Not yet assigned |
| Attorney Docket No.       | DPL-031          |

| METHOD OF PAYMENT  |                                 |  |              | FEE CALCULATION (continued)  |                                 |               |      |                       |                       |                 |                   |              |        |                                     |   |         |              |  |  |     |     |                           |              |        |       |                                    |  |        |                        |  |  |     |        |   |  |     |     |  |                    |      |     |   |  |      |      |  |  |     |     |                  |  |     |     |  |  |     |     |                          |  |     |     |                               |  |     |     |  |  |     |     |   |  |     |     |  |  |     |     |   |  |     |    |                                   |  |                     |  |  |  |                     |  |  |  |
|--|---------------------------------|--|--------------|--|---------------------------------|---------------|------|-----------------------|-----------------------|-----------------|-------------------|--------------|--------|-------------------------------------|---|---------|--------------|--|--|-----|-----|---------------------------|--------------|--------|-------|------------------------------------|--|--------|------------------------|--|--|-----|--------|---|--|-----|-----|--|--------------------|------|-----|---|--|------|------|--|--|-----|-----|------------------|--|-----|-----|--|--|-----|-----|--------------------------|--|-----|-----|-------------------------------|--|-----|-----|--|--|-----|-----|---|--|-----|-----|--|--|-----|-----|---|--|-----|----|-----------------------------------|--|---------------------|--|--|--|---------------------|--|--|--|
| 1. <input checked="" type="checkbox"/> Payment Enclosed:<br><input checked="" type="checkbox"/> Check <input type="checkbox"/> Money Order <input type="checkbox"/> Other  |                                 |  |              | 3. ADDITIONAL FEES   |                                 |               |      |                       |                       |                 |                   |              |        |                                     |   |         |              |  |  |     |     |                           |              |        |       |                                    |  |        |                        |  |  |     |        |   |  |     |     |  |                    |      |     |   |  |      |      |  |  |     |     |                  |  |     |     |  |  |     |     |                          |  |     |     |                               |  |     |     |  |  |     |     |   |  |     |     |  |  |     |     |   |  |     |    |                                   |  |                     |  |  |  |                     |  |  |  |
| 2. <input checked="" type="checkbox"/> The Commissioner is hereby authorized to credit or charge any fee indicated below for this submission to Deposit Account No. 20-0531.<br><input type="checkbox"/> Required Fees (copy of this sheet enclosed).<br><input checked="" type="checkbox"/> Additional fee required under 37 CFR 1.16 and 1.17.<br><input checked="" type="checkbox"/> Overpayment Credit.  |                                 |  |              | <table border="1" style="width:100%"> <thead> <tr> <th>Large Entity Fee (\$)</th> <th>Small Entity Fee (\$)</th> <th>Fee Description</th> <th>Fee Paid</th> </tr> </thead> <tbody> <tr><td>130</td><td>65</td><td>Surcharge - late filing fee or oath</td><td></td></tr> <tr><td>50</td><td>25</td><td>Surcharge - late provisional filing fee or cover sheet</td><td></td></tr> <tr><td>130</td><td>130</td><td>Non-English specification</td><td></td></tr> <tr><td>2,520</td><td>2,520</td><td>Request for ex parte reexamination</td><td></td></tr> <tr><td>110</td><td>55</td><td>Extension for reply within first month</td><td></td></tr> <tr><td>420</td><td>210</td><td>Extension for reply within second month</td><td></td></tr> <tr><td>950</td><td>475</td><td>Extension for reply within third month</td><td></td></tr> <tr><td>1480</td><td>740</td><td>Extension for reply within fourth month</td><td></td></tr> <tr><td>2010</td><td>1005</td><td>Extension for reply within fifth month</td><td></td></tr> <tr><td>330</td><td>165</td><td>Notice of Appeal</td><td></td></tr> <tr><td>330</td><td>165</td><td>Filing a brief in support of an appeal</td><td></td></tr> <tr><td>290</td><td>145</td><td>Request for oral hearing</td><td></td></tr> <tr><td>130</td><td>130</td><td>Petitions to the Commissioner</td><td></td></tr> <tr><td>180</td><td>180</td><td>Submission of Information Disclosure Statement</td><td></td></tr> <tr><td>770</td><td>385</td><td>Filing a submission after final rejection (37 CFR 1.129(a))</td><td></td></tr> <tr><td>770</td><td>385</td><td>For each additional invention to be examined (37 CFR 1.129(b))</td><td></td></tr> <tr><td>100</td><td>100</td><td>Certificate of Correction for applicant's error</td><td></td></tr> <tr><td>110</td><td>55</td><td>Submission of Terminal Disclaimer</td><td></td></tr> <tr><td colspan="2">Other fee (Specify)</td><td></td><td></td></tr> <tr><td colspan="2">Other fee (Specify)</td><td></td><td></td></tr> </tbody> </table> |                                 |               |      | Large Entity Fee (\$) | Small Entity Fee (\$) | Fee Description | Fee Paid          | 130          | 65     | Surcharge - late filing fee or oath |   | 50      | 25           | Surcharge - late provisional filing fee or cover sheet |  | 130 | 130 | Non-English specification |              | 2,520  | 2,520 | Request for ex parte reexamination |  | 110    | 55                     | Extension for reply within first month |  | 420 | 210    | Extension for reply within second month |  | 950 | 475 | Extension for reply within third month |                    | 1480 | 740 | Extension for reply within fourth month |  | 2010 | 1005 | Extension for reply within fifth month |  | 330 | 165 | Notice of Appeal |  | 330 | 165 | Filing a brief in support of an appeal |  | 290 | 145 | Request for oral hearing |  | 130 | 130 | Petitions to the Commissioner |  | 180 | 180 | Submission of Information Disclosure Statement |  | 770 | 385 | Filing a submission after final rejection (37 CFR 1.129(a)) |  | 770 | 385 | For each additional invention to be examined (37 CFR 1.129(b)) |  | 100 | 100 | Certificate of Correction for applicant's error |  | 110 | 55 | Submission of Terminal Disclaimer |  | Other fee (Specify) |  |  |  | Other fee (Specify) |  |  |  |
| Large Entity Fee (\$)  | Small Entity Fee (\$)           | Fee Description  | Fee Paid     |  |                                 |               |      |                       |                       |                 |                   |              |        |                                     |   |         |              |  |  |     |     |                           |              |        |       |                                    |  |        |                        |  |  |     |        |   |  |     |     |  |                    |      |     |   |  |      |      |  |  |     |     |                  |  |     |     |  |  |     |     |                          |  |     |     |                               |  |     |     |  |  |     |     |   |  |     |     |  |  |     |     |   |  |     |    |                                   |  |                     |  |  |  |                     |  |  |  |
| 130  | 65                              | Surcharge - late filing fee or oath                            |              |  |                                 |               |      |                       |                       |                 |                   |              |        |                                     |   |         |              |  |  |     |     |                           |              |        |       |                                    |  |        |                        |  |  |     |        |   |  |     |     |  |                    |      |     |   |  |      |      |  |  |     |     |                  |  |     |     |  |  |     |     |                          |  |     |     |                               |  |     |     |  |  |     |     |   |  |     |     |  |  |     |     |   |  |     |    |                                   |  |                     |  |  |  |                     |  |  |  |
| 50   | 25                              | Surcharge - late provisional filing fee or cover sheet         |              |  |                                 |               |      |                       |                       |                 |                   |              |        |                                     |   |         |              |  |  |     |     |                           |              |        |       |                                    |  |        |                        |  |  |     |        |   |  |     |     |  |                    |      |     |   |  |      |      |  |  |     |     |                  |  |     |     |  |  |     |     |                          |  |     |     |                               |  |     |     |  |  |     |     |   |  |     |     |  |  |     |     |   |  |     |    |                                   |  |                     |  |  |  |                     |  |  |  |
| 130  | 130                             | Non-English specification                                      |              |  |                                 |               |      |                       |                       |                 |                   |              |        |                                     |   |         |              |  |  |     |     |                           |              |        |       |                                    |  |        |                        |  |  |     |        |   |  |     |     |  |                    |      |     |   |  |      |      |  |  |     |     |                  |  |     |     |  |  |     |     |                          |  |     |     |                               |  |     |     |  |  |     |     |   |  |     |     |  |  |     |     |   |  |     |    |                                   |  |                     |  |  |  |                     |  |  |  |
| 2,520  | 2,520                           | Request for ex parte reexamination                             |              |  |                                 |               |      |                       |                       |                 |                   |              |        |                                     |   |         |              |  |  |     |     |                           |              |        |       |                                    |  |        |                        |  |  |     |        |   |  |     |     |  |                    |      |     |   |  |      |      |  |  |     |     |                  |  |     |     |  |  |     |     |                          |  |     |     |                               |  |     |     |  |  |     |     |   |  |     |     |  |  |     |     |   |  |     |    |                                   |  |                     |  |  |  |                     |  |  |  |
| 110  | 55                              | Extension for reply within first month                         |              |  |                                 |               |      |                       |                       |                 |                   |              |        |                                     |   |         |              |  |  |     |     |                           |              |        |       |                                    |  |        |                        |  |  |     |        |   |  |     |     |  |                    |      |     |   |  |      |      |  |  |     |     |                  |  |     |     |  |  |     |     |                          |  |     |     |                               |  |     |     |  |  |     |     |   |  |     |     |  |  |     |     |   |  |     |    |                                   |  |                     |  |  |  |                     |  |  |  |
| 420  | 210                             | Extension for reply within second month                        |              |  |                                 |               |      |                       |                       |                 |                   |              |        |                                     |   |         |              |  |  |     |     |                           |              |        |       |                                    |  |        |                        |  |  |     |        |   |  |     |     |  |                    |      |     |   |  |      |      |  |  |     |     |                  |  |     |     |  |  |     |     |                          |  |     |     |                               |  |     |     |  |  |     |     |   |  |     |     |  |  |     |     |   |  |     |    |                                   |  |                     |  |  |  |                     |  |  |  |
| 950  | 475                             | Extension for reply within third month                         |              |  |                                 |               |      |                       |                       |                 |                   |              |        |                                     |   |         |              |  |  |     |     |                           |              |        |       |                                    |  |        |                        |  |  |     |        |   |  |     |     |  |                    |      |     |   |  |      |      |  |  |     |     |                  |  |     |     |  |  |     |     |                          |  |     |     |                               |  |     |     |  |  |     |     |   |  |     |     |  |  |     |     |   |  |     |    |                                   |  |                     |  |  |  |                     |  |  |  |
| 1480   | 740                             | Extension for reply within fourth month                        |              |  |                                 |               |      |                       |                       |                 |                   |              |        |                                     |   |         |              |  |  |     |     |                           |              |        |       |                                    |  |        |                        |  |  |     |        |   |  |     |     |  |                    |      |     |   |  |      |      |  |  |     |     |                  |  |     |     |  |  |     |     |                          |  |     |     |                               |  |     |     |  |  |     |     |   |  |     |     |  |  |     |     |   |  |     |    |                                   |  |                     |  |  |  |                     |  |  |  |
| 2010   | 1005                            | Extension for reply within fifth month                         |              |  |                                 |               |      |                       |                       |                 |                   |              |        |                                     |   |         |              |  |  |     |     |                           |              |        |       |                                    |  |        |                        |  |  |     |        |   |  |     |     |  |                    |      |     |   |  |      |      |  |  |     |     |                  |  |     |     |  |  |     |     |                          |  |     |     |                               |  |     |     |  |  |     |     |   |  |     |     |  |  |     |     |   |  |     |    |                                   |  |                     |  |  |  |                     |  |  |  |
| 330  | 165                             | Notice of Appeal   |              |  |                                 |               |      |                       |                       |                 |                   |              |        |                                     |   |         |              |  |  |     |     |                           |              |        |       |                                    |  |        |                        |  |  |     |        |   |  |     |     |  |                    |      |     |   |  |      |      |  |  |     |     |                  |  |     |     |  |  |     |     |                          |  |     |     |                               |  |     |     |  |  |     |     |   |  |     |     |  |  |     |     |   |  |     |    |                                   |  |                     |  |  |  |                     |  |  |  |
| 330  | 165                             | Filing a brief in support of an appeal                         |              |  |                                 |               |      |                       |                       |                 |                   |              |        |                                     |   |         |              |  |  |     |     |                           |              |        |       |                                    |  |        |                        |  |  |     |        |   |  |     |     |  |                    |      |     |   |  |      |      |  |  |     |     |                  |  |     |     |  |  |     |     |                          |  |     |     |                               |  |     |     |  |  |     |     |   |  |     |     |  |  |     |     |   |  |     |    |                                   |  |                     |  |  |  |                     |  |  |  |
| 290  | 145                             | Request for oral hearing                                       |              |  |                                 |               |      |                       |                       |                 |                   |              |        |                                     |   |         |              |  |  |     |     |                           |              |        |       |                                    |  |        |                        |  |  |     |        |   |  |     |     |  |                    |      |     |   |  |      |      |  |  |     |     |                  |  |     |     |  |  |     |     |                          |  |     |     |                               |  |     |     |  |  |     |     |   |  |     |     |  |  |     |     |   |  |     |    |                                   |  |                     |  |  |  |                     |  |  |  |
| 130  | 130                             | Petitions to the Commissioner                                  |              |  |                                 |               |      |                       |                       |                 |                   |              |        |                                     |   |         |              |  |  |     |     |                           |              |        |       |                                    |  |        |                        |  |  |     |        |   |  |     |     |  |                    |      |     |   |  |      |      |  |  |     |     |                  |  |     |     |  |  |     |     |                          |  |     |     |                               |  |     |     |  |  |     |     |   |  |     |     |  |  |     |     |   |  |     |    |                                   |  |                     |  |  |  |                     |  |  |  |
| 180  | 180                             | Submission of Information Disclosure Statement                 |              |  |                                 |               |      |                       |                       |                 |                   |              |        |                                     |   |         |              |  |  |     |     |                           |              |        |       |                                    |  |        |                        |  |  |     |        |   |  |     |     |  |                    |      |     |   |  |      |      |  |  |     |     |                  |  |     |     |  |  |     |     |                          |  |     |     |                               |  |     |     |  |  |     |     |   |  |     |     |  |  |     |     |   |  |     |    |                                   |  |                     |  |  |  |                     |  |  |  |
| 770  | 385                             | Filing a submission after final rejection (37 CFR 1.129(a))    |              |  |                                 |               |      |                       |                       |                 |                   |              |        |                                     |   |         |              |  |  |     |     |                           |              |        |       |                                    |  |        |                        |  |  |     |        |   |  |     |     |  |                    |      |     |   |  |      |      |  |  |     |     |                  |  |     |     |  |  |     |     |                          |  |     |     |                               |  |     |     |  |  |     |     |   |  |     |     |  |  |     |     |   |  |     |    |                                   |  |                     |  |  |  |                     |  |  |  |
| 770  | 385                             | For each additional invention to be examined (37 CFR 1.129(b)) |              |  |                                 |               |      |                       |                       |                 |                   |              |        |                                     |   |         |              |  |  |     |     |                           |              |        |       |                                    |  |        |                        |  |  |     |        |   |  |     |     |  |                    |      |     |   |  |      |      |  |  |     |     |                  |  |     |     |  |  |     |     |                          |  |     |     |                               |  |     |     |  |  |     |     |   |  |     |     |  |  |     |     |   |  |     |    |                                   |  |                     |  |  |  |                     |  |  |  |
| 100  | 100                             | Certificate of Correction for applicant's error                |              |  |                                 |               |      |                       |                       |                 |                   |              |        |                                     |   |         |              |  |  |     |     |                           |              |        |       |                                    |  |        |                        |  |  |     |        |   |  |     |     |  |                    |      |     |   |  |      |      |  |  |     |     |                  |  |     |     |  |  |     |     |                          |  |     |     |                               |  |     |     |  |  |     |     |   |  |     |     |  |  |     |     |   |  |     |    |                                   |  |                     |  |  |  |                     |  |  |  |
| 110  | 55                              | Submission of Terminal Disclaimer                              |              |  |                                 |               |      |                       |                       |                 |                   |              |        |                                     |   |         |              |  |  |     |     |                           |              |        |       |                                    |  |        |                        |  |  |     |        |   |  |     |     |  |                    |      |     |   |  |      |      |  |  |     |     |                  |  |     |     |  |  |     |     |                          |  |     |     |                               |  |     |     |  |  |     |     |   |  |     |     |  |  |     |     |   |  |     |    |                                   |  |                     |  |  |  |                     |  |  |  |
| Other fee (Specify)  |                                 |  |              |  |                                 |               |      |                       |                       |                 |                   |              |        |                                     |   |         |              |  |  |     |     |                           |              |        |       |                                    |  |        |                        |  |  |     |        |   |  |     |     |  |                    |      |     |   |  |      |      |  |  |     |     |                  |  |     |     |  |  |     |     |                          |  |     |     |                               |  |     |     |  |  |     |     |   |  |     |     |  |  |     |     |   |  |     |    |                                   |  |                     |  |  |  |                     |  |  |  |
| Other fee (Specify)  |                                 |  |              |  |                                 |               |      |                       |                       |                 |                   |              |        |                                     |   |         |              |  |  |     |     |                           |              |        |       |                                    |  |        |                        |  |  |     |        |   |  |     |     |  |                    |      |     |   |  |      |      |  |  |     |     |                  |  |     |     |  |  |     |     |                          |  |     |     |                               |  |     |     |  |  |     |     |   |  |     |     |  |  |     |     |   |  |     |    |                                   |  |                     |  |  |  |                     |  |  |  |
| 3. <input checked="" type="checkbox"/> Applicant claims small entity status.   |                                 |  |              |  |                                 |               |      |                       |                       |                 |                   |              |        |                                     |   |         |              |  |  |     |     |                           |              |        |       |                                    |  |        |                        |  |  |     |        |   |  |     |     |  |                    |      |     |   |  |      |      |  |  |     |     |                  |  |     |     |  |  |     |     |                          |  |     |     |                               |  |     |     |  |  |     |     |   |  |     |     |  |  |     |     |   |  |     |    |                                   |  |                     |  |  |  |                     |  |  |  |
| FEE CALCULATION  |                                 |  |              |  |                                 |               |      |                       |                       |                 |                   |              |        |                                     |   |         |              |  |  |     |     |                           |              |        |       |                                    |  |        |                        |  |  |     |        |   |  |     |     |  |                    |      |     |   |  |      |      |  |  |     |     |                  |  |     |     |  |  |     |     |                          |  |     |     |                               |  |     |     |  |  |     |     |   |  |     |     |  |  |     |     |   |  |     |    |                                   |  |                     |  |  |  |                     |  |  |  |
| 1. FILING FEE  |                                 |  |              |  |                                 |               |      |                       |                       |                 |                   |              |        |                                     |   |         |              |  |  |     |     |                           |              |        |       |                                    |  |        |                        |  |  |     |        |   |  |     |     |  |                    |      |     |   |  |      |      |  |  |     |     |                  |  |     |     |  |  |     |     |                          |  |     |     |                               |  |     |     |  |  |     |     |   |  |     |     |  |  |     |     |   |  |     |    |                                   |  |                     |  |  |  |                     |  |  |  |
| <table border="1" style="width:100%"> <thead> <tr> <th>Large Entity Fee (\$)</th> <th>Fee Description</th> <th>Fee Paid</th> </tr> </thead> <tbody> <tr><td>770</td><td>Utility filing fee</td><td>770.00</td></tr> <tr><td>340</td><td>Design filing fee</td><td></td></tr> <tr><td>160</td><td>Provisional filing fee</td><td></td></tr> </tbody> </table>   |                                 |  |              | Large Entity Fee (\$)  | Fee Description                 | Fee Paid      | 770  | Utility filing fee    | 770.00                | 340             | Design filing fee |              | 160    | Provisional filing fee              |   |         |              |  |  |     |     |                           |              |        |       |                                    |  |        |                        |  |  |     |        |   |  |     |     |  |                    |      |     |   |  |      |      |  |  |     |     |                  |  |     |     |  |  |     |     |                          |  |     |     |                               |  |     |     |  |  |     |     |   |  |     |     |  |  |     |     |   |  |     |    |                                   |  |                     |  |  |  |                     |  |  |  |
| Large Entity Fee (\$)  | Fee Description                 | Fee Paid   |              |  |                                 |               |      |                       |                       |                 |                   |              |        |                                     |   |         |              |  |  |     |     |                           |              |        |       |                                    |  |        |                        |  |  |     |        |   |  |     |     |  |                    |      |     |   |  |      |      |  |  |     |     |                  |  |     |     |  |  |     |     |                          |  |     |     |                               |  |     |     |  |  |     |     |   |  |     |     |  |  |     |     |   |  |     |    |                                   |  |                     |  |  |  |                     |  |  |  |
| 770  | Utility filing fee              | 770.00   |              |  |                                 |               |      |                       |                       |                 |                   |              |        |                                     |   |         |              |  |  |     |     |                           |              |        |       |                                    |  |        |                        |  |  |     |        |   |  |     |     |  |                    |      |     |   |  |      |      |  |  |     |     |                  |  |     |     |  |  |     |     |                          |  |     |     |                               |  |     |     |  |  |     |     |   |  |     |     |  |  |     |     |   |  |     |    |                                   |  |                     |  |  |  |                     |  |  |  |
| 340  | Design filing fee               |  |              |  |                                 |               |      |                       |                       |                 |                   |              |        |                                     |   |         |              |  |  |     |     |                           |              |        |       |                                    |  |        |                        |  |  |     |        |   |  |     |     |  |                    |      |     |   |  |      |      |  |  |     |     |                  |  |     |     |  |  |     |     |                          |  |     |     |                               |  |     |     |  |  |     |     |   |  |     |     |  |  |     |     |   |  |     |    |                                   |  |                     |  |  |  |                     |  |  |  |
| 160  | Provisional filing fee          |  |              |  |                                 |               |      |                       |                       |                 |                   |              |        |                                     |   |         |              |  |  |     |     |                           |              |        |       |                                    |  |        |                        |  |  |     |        |   |  |     |     |  |                    |      |     |   |  |      |      |  |  |     |     |                  |  |     |     |  |  |     |     |                          |  |     |     |                               |  |     |     |  |  |     |     |   |  |     |     |  |  |     |     |   |  |     |    |                                   |  |                     |  |  |  |                     |  |  |  |
| <table border="1" style="width:100%"> <thead> <tr> <th></th> <th>Number Filed</th> <th>Number Extra</th> <th>Rate</th> <th>Amount</th> </tr> </thead> <tbody> <tr> <td>Total Claims</td> <td>26</td> <td>- 20 = 6</td> <td>x \$ 18.00 =</td> <td>108.00</td> </tr> <tr> <td>Independent Claims</td> <td>2</td> <td>- 3 = 0</td> <td>x \$ 86.00 =</td> <td></td> </tr> <tr> <td colspan="4"><input type="checkbox"/> Multiple Dependent Claim(s), if any</td> <td>\$290.00 =</td> </tr> <tr> <td colspan="4" style="text-align:right">TOTAL:</td> <td>878.00</td> </tr> <tr> <td colspan="4" style="text-align:right">SMALL ENTITY DISCOUNT:</td> <td>439.00</td> </tr> <tr> <td colspan="4" style="text-align:right">SUBTOTAL (1)</td> <td>(\$ 439.00)</td> </tr> </tbody> </table>          |                                 |  |              |  | Number Filed                    | Number Extra  | Rate | Amount                | Total Claims          | 26              | - 20 = 6          | x \$ 18.00 = | 108.00 | Independent Claims                  | 2 | - 3 = 0 | x \$ 86.00 = |  | <input type="checkbox"/> Multiple Dependent Claim(s), if any       |     |     |                           | \$290.00 =   | TOTAL: |       |                                    |  | 878.00 | SMALL ENTITY DISCOUNT: |  |  |     | 439.00 | SUBTOTAL (1)                            |  |     |     | (\$ 439.00)                            |                    |      |     |   |  |      |      |  |  |     |     |                  |  |     |     |  |  |     |     |                          |  |     |     |                               |  |     |     |  |  |     |     |   |  |     |     |  |  |     |     |   |  |     |    |                                   |  |                     |  |  |  |                     |  |  |  |
|  | Number Filed                    | Number Extra   | Rate         | Amount   |                                 |               |      |                       |                       |                 |                   |              |        |                                     |   |         |              |  |  |     |     |                           |              |        |       |                                    |  |        |                        |  |  |     |        |   |  |     |     |  |                    |      |     |   |  |      |      |  |  |     |     |                  |  |     |     |  |  |     |     |                          |  |     |     |                               |  |     |     |  |  |     |     |   |  |     |     |  |  |     |     |   |  |     |    |                                   |  |                     |  |  |  |                     |  |  |  |
| Total Claims   | 26                              | - 20 = 6   | x \$ 18.00 = | 108.00   |                                 |               |      |                       |                       |                 |                   |              |        |                                     |   |         |              |  |  |     |     |                           |              |        |       |                                    |  |        |                        |  |  |     |        |   |  |     |     |  |                    |      |     |   |  |      |      |  |  |     |     |                  |  |     |     |  |  |     |     |                          |  |     |     |                               |  |     |     |  |  |     |     |   |  |     |     |  |  |     |     |   |  |     |    |                                   |  |                     |  |  |  |                     |  |  |  |
| Independent Claims   | 2                               | - 3 = 0  | x \$ 86.00 = |  |                                 |               |      |                       |                       |                 |                   |              |        |                                     |   |         |              |  |  |     |     |                           |              |        |       |                                    |  |        |                        |  |  |     |        |   |  |     |     |  |                    |      |     |   |  |      |      |  |  |     |     |                  |  |     |     |  |  |     |     |                          |  |     |     |                               |  |     |     |  |  |     |     |   |  |     |     |  |  |     |     |   |  |     |    |                                   |  |                     |  |  |  |                     |  |  |  |
| <input type="checkbox"/> Multiple Dependent Claim(s), if any   |                                 |  |              | \$290.00 =   |                                 |               |      |                       |                       |                 |                   |              |        |                                     |   |         |              |  |  |     |     |                           |              |        |       |                                    |  |        |                        |  |  |     |        |   |  |     |     |  |                    |      |     |   |  |      |      |  |  |     |     |                  |  |     |     |  |  |     |     |                          |  |     |     |                               |  |     |     |  |  |     |     |   |  |     |     |  |  |     |     |   |  |     |    |                                   |  |                     |  |  |  |                     |  |  |  |
| TOTAL:   |                                 |  |              | 878.00   |                                 |               |      |                       |                       |                 |                   |              |        |                                     |   |         |              |  |  |     |     |                           |              |        |       |                                    |  |        |                        |  |  |     |        |   |  |     |     |  |                    |      |     |   |  |      |      |  |  |     |     |                  |  |     |     |  |  |     |     |                          |  |     |     |                               |  |     |     |  |  |     |     |   |  |     |     |  |  |     |     |   |  |     |    |                                   |  |                     |  |  |  |                     |  |  |  |
| SMALL ENTITY DISCOUNT:   |                                 |  |              | 439.00   |                                 |               |      |                       |                       |                 |                   |              |        |                                     |   |         |              |  |  |     |     |                           |              |        |       |                                    |  |        |                        |  |  |     |        |   |  |     |     |  |                    |      |     |   |  |      |      |  |  |     |     |                  |  |     |     |  |  |     |     |                          |  |     |     |                               |  |     |     |  |  |     |     |   |  |     |     |  |  |     |     |   |  |     |    |                                   |  |                     |  |  |  |                     |  |  |  |
| SUBTOTAL (1)   |                                 |  |              | (\$ 439.00)  |                                 |               |      |                       |                       |                 |                   |              |        |                                     |   |         |              |  |  |     |     |                           |              |        |       |                                    |  |        |                        |  |  |     |        |   |  |     |     |  |                    |      |     |   |  |      |      |  |  |     |     |                  |  |     |     |  |  |     |     |                          |  |     |     |                               |  |     |     |  |  |     |     |   |  |     |     |  |  |     |     |   |  |     |    |                                   |  |                     |  |  |  |                     |  |  |  |
| 2. AMENDMENT CLAIM FEES  |                                 |  |              |  |                                 |               |      |                       |                       |                 |                   |              |        |                                     |   |         |              |  |  |     |     |                           |              |        |       |                                    |  |        |                        |  |  |     |        |   |  |     |     |  |                    |      |     |   |  |      |      |  |  |     |     |                  |  |     |     |  |  |     |     |                          |  |     |     |                               |  |     |     |  |  |     |     |   |  |     |     |  |  |     |     |   |  |     |    |                                   |  |                     |  |  |  |                     |  |  |  |
| <table border="1" style="width:100%"> <thead> <tr> <th>Claims Remaining After Amend.</th> <th>Highest No. Previously Paid For</th> <th>Present Extra</th> <th>Rate</th> <th>Fee Paid</th> </tr> </thead> <tbody> <tr> <td>Total</td> <td>-</td> <td>=</td> <td>x \$ 18.00 =</td> <td></td> </tr> <tr> <td>Indep.</td> <td>-</td> <td>=</td> <td>x \$ 86.00 =</td> <td></td> </tr> <tr> <td colspan="4"><input type="checkbox"/> First Presentation of Multiple Dep. Claim</td> <td>+ \$290.00 =</td> </tr> <tr> <td colspan="4" style="text-align:right">TOTAL:</td> <td>(\$)</td> </tr> <tr> <td colspan="4" style="text-align:right">SMALL ENTITY DISCOUNT:</td> <td>(\$)</td> </tr> <tr> <td colspan="4" style="text-align:right">SUBTOTAL (2)</td> <td>(\$)</td> </tr> </tbody> </table> |                                 |  |              | Claims Remaining After Amend.  | Highest No. Previously Paid For | Present Extra | Rate | Fee Paid              | Total                 | -               | =                 | x \$ 18.00 = |        | Indep.                              | - | =       | x \$ 86.00 = |  | <input type="checkbox"/> First Presentation of Multiple Dep. Claim |     |     |                           | + \$290.00 = | TOTAL: |       |                                    |  | (\$)   | SMALL ENTITY DISCOUNT: |  |  |     | (\$)   | SUBTOTAL (2)                            |  |     |     | (\$)                                   | SUBTOTAL (3) (\$ ) |      |     |   |  |      |      |  |  |     |     |                  |  |     |     |  |  |     |     |                          |  |     |     |                               |  |     |     |  |  |     |     |   |  |     |     |  |  |     |     |   |  |     |    |                                   |  |                     |  |  |  |                     |  |  |  |
| Claims Remaining After Amend.  | Highest No. Previously Paid For | Present Extra  | Rate         | Fee Paid   |                                 |               |      |                       |                       |                 |                   |              |        |                                     |   |         |              |  |  |     |     |                           |              |        |       |                                    |  |        |                        |  |  |     |        |   |  |     |     |  |                    |      |     |   |  |      |      |  |  |     |     |                  |  |     |     |  |  |     |     |                          |  |     |     |                               |  |     |     |  |  |     |     |   |  |     |     |  |  |     |     |   |  |     |    |                                   |  |                     |  |  |  |                     |  |  |  |
| Total  | -                               | =  | x \$ 18.00 = |  |                                 |               |      |                       |                       |                 |                   |              |        |                                     |   |         |              |  |  |     |     |                           |              |        |       |                                    |  |        |                        |  |  |     |        |   |  |     |     |  |                    |      |     |   |  |      |      |  |  |     |     |                  |  |     |     |  |  |     |     |                          |  |     |     |                               |  |     |     |  |  |     |     |   |  |     |     |  |  |     |     |   |  |     |    |                                   |  |                     |  |  |  |                     |  |  |  |
| Indep.   | -                               | =  | x \$ 86.00 = |  |                                 |               |      |                       |                       |                 |                   |              |        |                                     |   |         |              |  |  |     |     |                           |              |        |       |                                    |  |        |                        |  |  |     |        |   |  |     |     |  |                    |      |     |   |  |      |      |  |  |     |     |                  |  |     |     |  |  |     |     |                          |  |     |     |                               |  |     |     |  |  |     |     |   |  |     |     |  |  |     |     |   |  |     |    |                                   |  |                     |  |  |  |                     |  |  |  |
| <input type="checkbox"/> First Presentation of Multiple Dep. Claim   |                                 |  |              | + \$290.00 =   |                                 |               |      |                       |                       |                 |                   |              |        |                                     |   |         |              |  |  |     |     |                           |              |        |       |                                    |  |        |                        |  |  |     |        |   |  |     |     |  |                    |      |     |   |  |      |      |  |  |     |     |                  |  |     |     |  |  |     |     |                          |  |     |     |                               |  |     |     |  |  |     |     |   |  |     |     |  |  |     |     |   |  |     |    |                                   |  |                     |  |  |  |                     |  |  |  |
| TOTAL:   |                                 |  |              | (\$)   |                                 |               |      |                       |                       |                 |                   |              |        |                                     |   |         |              |  |  |     |     |                           |              |        |       |                                    |  |        |                        |  |  |     |        |   |  |     |     |  |                    |      |     |   |  |      |      |  |  |     |     |                  |  |     |     |  |  |     |     |                          |  |     |     |                               |  |     |     |  |  |     |     |   |  |     |     |  |  |     |     |   |  |     |    |                                   |  |                     |  |  |  |                     |  |  |  |
| SMALL ENTITY DISCOUNT:   |                                 |  |              | (\$)   |                                 |               |      |                       |                       |                 |                   |              |        |                                     |   |         |              |  |  |     |     |                           |              |        |       |                                    |  |        |                        |  |  |     |        |   |  |     |     |  |                    |      |     |   |  |      |      |  |  |     |     |                  |  |     |     |  |  |     |     |                          |  |     |     |                               |  |     |     |  |  |     |     |   |  |     |     |  |  |     |     |   |  |     |    |                                   |  |                     |  |  |  |                     |  |  |  |
| SUBTOTAL (2)   |                                 |  |              | (\$)   |                                 |               |      |                       |                       |                 |                   |              |        |                                     |   |         |              |  |  |     |     |                           |              |        |       |                                    |  |        |                        |  |  |     |        |   |  |     |     |  |                    |      |     |   |  |      |      |  |  |     |     |                  |  |     |     |  |  |     |     |                          |  |     |     |                               |  |     |     |  |  |     |     |   |  |     |     |  |  |     |     |   |  |     |    |                                   |  |                     |  |  |  |                     |  |  |  |
|  |                                 |  |              | SUBTOTAL (1) 439.00<br>SUBTOTAL (2) 0.00<br>SUBTOTAL (3) 0.00  |                                 |               |      |                       |                       |                 |                   |              |        |                                     |   |         |              |  |  |     |     |                           |              |        |       |                                    |  |        |                        |  |  |     |        |   |  |     |     |  |                    |      |     |   |  |      |      |  |  |     |     |                  |  |     |     |  |  |     |     |                          |  |     |     |                               |  |     |     |  |  |     |     |   |  |     |     |  |  |     |     |   |  |     |    |                                   |  |                     |  |  |  |                     |  |  |  |
|  |                                 |  |              | TOTAL (\$ 439.00)  |                                 |               |      |                       |                       |                 |                   |              |        |                                     |   |         |              |  |  |     |     |                           |              |        |       |                                    |  |        |                        |  |  |     |        |   |  |     |     |  |                    |      |     |   |  |      |      |  |  |     |     |                  |  |     |     |  |  |     |     |                          |  |     |     |                               |  |     |     |  |  |     |     |   |  |     |     |  |  |     |     |   |  |     |    |                                   |  |                     |  |  |  |                     |  |  |  |
| CORRESPONDENCE ADDRESS   |                                 |  |              | SIGNATURE BLOCK  |                                 |               |      |                       |                       |                 |                   |              |        |                                     |   |         |              |  |  |     |     |                           |              |        |       |                                    |  |        |                        |  |  |     |        |   |  |     |     |  |                    |      |     |   |  |      |      |  |  |     |     |                  |  |     |     |  |  |     |     |                          |  |     |     |                               |  |     |     |  |  |     |     |   |  |     |     |  |  |     |     |   |  |     |    |                                   |  |                     |  |  |  |                     |  |  |  |
| Direct all correspondence to:<br>Patent Administrator<br>Testa, Hurwitz & Thibault, LLP<br>High Street Tower-125 High Street<br>Boston, MA 02110<br>Tel. No.: (617) 248-7000<br>Fax No.: (617) 248-7100  |                                 |  |              | Respectfully submitted,<br><br>Date: March 1, 2004<br>Reg. No.: 41,513<br>Tel. No.: (617) 310-7589<br>Fax No.: (617) 248-7100<br><br>Jason A. Reyes<br>Attorney for the Applicants<br>Testa, Hurwitz & Thibault, LLP<br>High Street Tower-125 High Street<br>Boston, MA 02110  |                                 |               |      |                       |                       |                 |                   |              |        |                                     |   |         |              |  |  |     |     |                           |              |        |       |                                    |  |        |                        |  |  |     |        |   |  |     |     |  |                    |      |     |   |  |      |      |  |  |     |     |                  |  |     |     |  |  |     |     |                          |  |     |     |                               |  |     |     |  |  |     |     |   |  |     |     |  |  |     |     |   |  |     |    |                                   |  |                     |  |  |  |                     |  |  |  |